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10/027,738	12/21/2001	Dell R. Munk	1019.2.1	2749

7590 07/11/2003  
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EXAMINER

NICOLAS, WESLEY A

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 07/11/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/027,738

Applicant(s)

MUNK ET AL.

Examiner

Wesley A. Nicolas

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 3 and 21 are objected to because of the following informalities: Claim 3 does not have a period at the end of the claim and claim 21 should have a period instead of a semi-colon at the end of the claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the polyhedron" in line 2. There is insufficient antecedent basis for this limitation in the claim. Perhaps Applicant intended to make claim 6 dependent from claim 5 instead of claim 1, but even if that was the case, "polyhedron" is not recited in claim 5.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1742

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 10-12, and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Dahlgren (4,337,136).

Claim 1 is rejected because Dahlgren teaches an apparatus for the generation of sanitizing chemicals, the apparatus comprising:

- a buoyant enclosure (Fig. 2, numeral 11 and col. 1, line 56: "floating");
- a plurality of electrodes extending outward from the buoyant enclosure (Fig. 3, numerals 20 and 21);
- a power source disposed within the buoyant enclosure (Fig. 2, numeral 30); and
- a polarity reversing module electrically connected to the plurality of electrodes (col. 2, lines 9-13).

Claim 2 is rejected because Dahlgren teaches that the buoyant enclosure comprises an upper buoyant housing (Fig. 2, area above numeral 33) and a lower buoyant housing (Fig. 2, area below numeral 33) disposed to one side of the upper buoyant housing.

Claim 3 is rejected because Dahlgren teaches that the buoyant enclosure is configured to float freely within a body of water (col. 1, line 56: "floating...on the surface of the water").

Claim 4 is rejected because Dahlgren teaches that the upper and lower buoyant housings comprises a floatable composite plastic material (col. 2, lines 46-52: "container of insulating material, preferably plastic").

Art Unit: 1742

Claim 5 is rejected because Dahlgren teaches that the buoyant enclosure is configured with a polyhedral shape (Fig. 1, numeral 11).

Claim 10 is rejected because Dahlgren teaches that the plurality of electrodes comprises at least two electrodes (Fig. 3, numerals 20 and 21).

Claim 11 is rejected because Dahlgren teaches a metal electrode coated with an oxidizer coating thereby configured to resist the formation of scale, and prevent corrosion (col. 3, lines 3-6).

Claim 12 is rejected because Dahlgren teaches that the power source comprises a replaceable power supply (Fig. 2, numeral 30: battery is replaceable).

Claim 17 is rejected because Dahlgren teaches that the polarity-reversing module is configured to alternate the polarity of the electrodes in order to prevent chemical accumulation on the surface of the electrodes (col. 2, lines 7-13).

Claims 18-20 are rejected because Dahlgren teaches that the polarity reversing module is configured to reverse the polarity of the electrodes at a selected time interval (col. 2, lines 7-13) and further includes a timing circuit (Fig. 4, numeral 35).

Regarding the time interval of claim 20, claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 120 USPQ 528, 531 (CCPA 1959). "Apparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). The intended use and operating method of an apparatus is not germane to the issue of patentability of the apparatus. In re Casey, 370 F.2d 576, 580, 152 USPQ 235, 238 (CCPA

Art Unit: 1742

1967). Furthermore, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd.

Pat. App. & Inter. 1987). See MPEP § 2114.

Claim 21 is rejected because Dahlgren teaches an apparatus for the generation of sanitizing chemicals, the apparatus comprising:

- an enclosure (Fig. 2, numeral 11);
- a plurality of electrodes extending outward from the enclosure (Fig. 3, numerals 20 and 21);
- a power source for powering the plurality of electrodes (Fig. 2, numeral 30); and
- a polarity reversing module electrically connected between the plurality of electrodes and the power source (col. 2, lines 9-13).

6. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Sherman (5,059,296).

Claim 22 is rejected because Sherman teaches an apparatus for the generation of sanitizing chemicals, the apparatus comprising:

- a buoyant enclosure configured to be capable of free-floating within a body of water (Abstract);

Art Unit: 1742

- a plurality of electrodes extending outward from the buoyant enclosure (Fig. 4, numerals 22 and 20);
- a plurality of photovoltaic solar panels disposed within the buoyant enclosure (Fig. 1, numeral 14).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlgren (4,337,136).

Claims 7 and 9 are rejected because it would have been obvious and within the ordinary skill in the art at the time the invention was made to have modified the shape of the enclosure because it has been held that a person of ordinary skill in the art would

Art Unit: 1742

have found obvious absent persuasive evidence that the particular changes in shape of the enclosure was significant to the degree of floatation or angle at which the water or light strikes the enclosure. See for example In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). As such, one of ordinary skill in the art would have routinely adjusted such variables to obtain ideal values of either floatation or surface area exposure.

10. Claims 6 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlgren (4,337,136), and further in view of Sherman (5,059,296).

Dahlgren are as applied, argued, and disclosed above and incorporated herein but fail to specifically teach the use of photovoltaic cells attached to the enclosure.

Sherman teaches the use of photovoltaic cells attached to a floating enclosure to provide energy for the purification of water (Title and Abstract).

Claims 6 and 13-16 are rejected because it would have been obvious and within the ordinary skill in the art at the time the invention was made to have modified Dahlgren to use the photovoltaic solar panels of Sherman because Sherman teach of the use of photovoltaic solar panels which would allow the enclosure to operate on a renewable energy source (*i.e.* light) and would not require the attachment of a separate power supply or replacement of batteries, thereby increasing the overall efficiency of the apparatus.



***Allowable Subject Matter***

11. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 8, the specific buoyant enclosure which comprises one central photovoltaic cell and 8 photovoltaic cells each of which is attached to one side of the enclosure was not taught or suggested by the prior art of record.

Art Unit: 1742

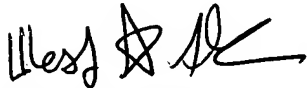
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley Nicolas whose telephone number is (703)305-0082. The examiner can normally be reached on Mon.-Thurs. from 7am to 5pm.

The Supervisory Primary Examiner for this Art Unit is Roy King whose telephone number is (703) 308-1146.

The fax number for this Group is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



Wesley A. Nicolas

July 10, 2003